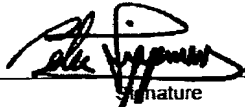
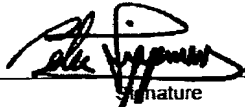
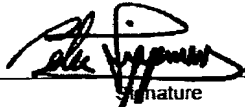




PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) xAAA-02													
Please note the <u>Rule 10</u> mailing certification on the accompanying transmittal sheet.	Application Number 09/886,959	Filed June 20, 2001													
	First Named Inventor Algirdas Avizienis														
	Art Unit 2113	Examiner Bryce P. Bonzo													
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table><tr><td><input type="checkbox"/></td><td>applicant/inventor.</td><td rowspan="3"> Signature</td></tr><tr><td><input type="checkbox"/></td><td>assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</td><td>Peter I. Lippman Typed or printed name</td></tr><tr><td><input checked="" type="checkbox"/></td><td>attorney or agent of record. 22,835 Registration number</td><td>775/677-8822 Telephone number</td></tr><tr><td><input type="checkbox"/></td><td>attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34</td><td>November 24, 2006 Date</td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <p><input checked="" type="checkbox"/> *Total of 1 forms are submitted.</p>				<input type="checkbox"/>	applicant/inventor.	 Signature	<input type="checkbox"/>	assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Peter I. Lippman Typed or printed name	<input checked="" type="checkbox"/>	attorney or agent of record. 22,835 Registration number	775/677-8822 Telephone number	<input type="checkbox"/>	attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34	November 24, 2006 Date
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Algirdas Avizienis	Group
Serial No.:	09/886,959	Art
Filed:	June 20, 2001	Unit:
Title:	"SELF-TESTING AND -REPAIRING FAULT-TOLERANCE INFRASTRUC- TURE FOR COMPUTER SYSTEMS"	2113
Our docket:	xAAA-02	Examiner Bryce P. Bonzo

PRE-APPEAL BRIEF
REQUEST FOR REVIEW

Commissioner for Patents
Box 1450
Alexandria VA 22313-1450

Sir:

This discussion is pursuant to the attached form PTO/SB/33 (modified). Applicant submits these clear issues for consideration by the Review panel, asking that the panel remove them from the dispute. (Other issues, remaining for appeal, require BPAI analysis as they seem ineligible for "Pre-Appeal Brief" Review.)

1. Hardware — No cited art satisfies the claim-1 recitation "a hardware network of components having substantially no software".

This point implicates claims 1 through 12.

Best's cited circuit is operated by associated software, most prominently avionics software. Please see the October 24, 2006 Request for Reconsideration (hereinafter "October 2006 request"), at page 2, and the May 15, 2006 amendment in the section bridging pages 34 & 35 (hereinafter styled "May ammt. 34-35"), and the declaration of Jean-Claude LaPrie at page 6, paragraph 24 (hereinafter "LaPrie 6 ¶ 24").

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2. "Generic" infrastructure, capable of protecting virtually any computing system that can issue an error message and handle a recovery command — No cited art teaches this limitation.

This point implicates claims 3, 23, 35, 46, 69, 74 and 78 — and in addition claims 55 through 59, and claim 79, although in these latter six claims the word "generic" does not appear.

Please see *October 2006 request* at page 3; *May ammt.* 57, section "(3)"; and *LaPrie* 7-8 ¶¶ 27-28:

(1) The control software of Best is not generic. It is the opposite, *i. e.* entirely custom written to run his hardware.

(2) In the DEDIX experiment (described in the cited Avizienis paper), programs had to be custom written specifically with "cross-check" points. Whatever faults the DEDIX "handled" were all set by those cross-check points, *i. e.* by custom features of the programs.

3. Infrastructure guards against failure of an entire computing system — No cited art satisfies this limitation.

This point implicates claims 13 through 24, 34, 42 through 51, 58, 62 through 64, 68, 70, 71, 73, 74, and 76 through 78.

Previous discussions of this point appear at *October 2006 request* at pages 3 and 4; *May ammt.* pages 41 and 42 (section titled "CLAIMS 13 THROUGH 17, AND 19 THROUGH 21"); and *LaPrie* 11 ¶¶ 44-46.

Best never teaches guarding against failure of an entire computing system. His invention is expressly for "management, comparison, and correction of redundant digital data". He writes, "The present invention is a system for controlling and managing redundant inter-processor communication channels."

Such channels are much less than "an entire computing system". The fate of data after leaving his "host processor data bus" into the rest of Best's computing system is no concern of him or his invention.

4. "Substantially commercial, off-the-shelf" — In the Official Action of August 24, 2006, it is said that this phrase appears in the Applicant's claims. The associated rejection is confirmed in the Advisory Action of November 13, 2006.

That is incorrect. The phrase was removed from the claims in the Amendment mailed October 12, 2005 — over a year ago.

The associated rejections therefore appear to be "clearly improper rejections based upon error(s) in facts".

The claims implicated by this point are claims 2, 3, 7, 12, 19, 24, 27, 41, 54, 61, and 64 through 69.

Applicant's most-recent comments are in the November 22, 2006 Amendment at page 3, 2d paragraph; the October 2006 request at page 5, 2d and 3rd paragraphs; and the May Ammt. at pages 28 and 29.

(The related phrase "substantially exclusively", if of interest, is discussed in the November 22, 2006 Amendment at pages 1-5, and with reference to the exhibit accompanying that paper.)

5. "Such" — The specific usage of this term has been accepted by the Board of Appeals, on appeal. It appears in many issued U. S. patents.

In view of this broad prior acceptance, a categorical and a priori objection to this usage is also among "clearly improper rejections based upon error(s) in facts" — even though in other circumstances it might be classed as "claim interpretation". In fact, in some of the Official Actions in the present case, this usage appears to be accepted.

This point implicates all of the claims.

Discussion of this appears in October 2006 Ammt. at pages 6-7.

Also, "such" as a very specialized article (i. e., substitute for "the") appears in 35 U.S.C. § 252, ¶ 2 (first two occurrences), quoted in at least one BPAI precedential opinion: Eggert, at 15.

6. The infrastructure can't and doesn't run applications — No cited art satisfies this limitation.

This point implicates at least claims 6, 38, 45, 48, 57, 67, 70, 71, 76, and 81 through 83.

Applicant discussed this in October 2006 Ammt. at pages 7-8.

Best teaches (column 6, lines 29 through 31) e. g. avionics computations in his machines. These would be software applications.

7. Failure to show proper motivation for combination of references — The two prior-art citations are incompatible technologies, with no real motivation for combining. Also, they coexisted for ten years before Applicant's filing, but no oth-

ers proposed their combination — additional basis for seeing absence of motivation.

This point implicates all claims rejected under § 103, namely: claims 2, 3, 9, 10, 12, 18, 21 through 24, 33 through 38, 41, 43, 46, 49, 50, 51, 52, 55 through 61, and 64 through 69.

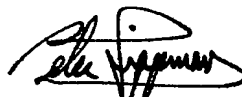
Applicant's discussions appear e. g. at May ammt. 45-49, showing these known facts (to which the Official Actions make no substantive response):

- combination of the two references offers no real benefit, and so is not properly motivated (May ammt. 48-49; LaPrie 8-9 ¶¶ 30-36 and 9-10 ¶¶ 38-40);
- the references describe technologies that would work together poorly, and that skilled artisans do not regard as "going together" (LaPrie 16, ¶ 68);
- if combination of the references were obvious, that combination would have been invented by others (May ammt. 45-46);
- this reasoning is approved by the High Courts (May ammt. 47);
- obviously there has been continuing strong need (May ammt. 46-47); and
- for certain claims, neither reference "even satisfies . . . the underlying independent claim" (LaPrie 6 ¶ 24, and e. g. 11 ¶¶ 43-50).

Conclusion

Applicant earnestly asks that the Review panel withdraw all rejections corresponding to the above seven clear issues, and summarize the status of the pending claims.

Respectfully submitted,



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Attorney for the Applicant